

Appln. No.: 10/038,439
Amndt dated 03 01 2004 (Paper No. 9)
Reply to Communication mailed 02 02 2004

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Original) A method for coating a surface of a screw machine which comprises the steps of:

providing at least one of a plurality of screw machine components including a rotor housing having at least a pair of parallel, overlapping bores; at least a conjugate pair of intermeshing rotors located in said bores, wherein each of said rotors has helical lobes having radially outward tip portions and intervening radially inward root portions;

rough coating a surface of at least one of said plurality of components with a conformable coating, wherein said coating is applied to said surface and has one of variable thickness over the surface and evenly applied with a substantially excess thickness over said surface; and

leveling said conformable coating to a substantially uniform thickness prior to final assembly of said plurality of components, said substantially uniform thickness selected to ease assembly of said components while maintaining coating performance criteria.

2. (Original) The method according to claim 1, wherein the step of leveling further includes the step of moving means for leveling adjacent said surface.

3. (Original) The method according to claim 2, wherein said means for leveling comprises a sizing rod or fixture.

4. (Currently Amended) The method according to claim 2, wherein said means for leveling comprises a mating component to said at least one of said plurality of components.

5. (Original) The method according to claim 4, wherein said at least one of said plurality of components comprises a screw rotor, and wherein said mating component comprises an intermeshing screw rotor.

6. (Original) The method according to claim 5, wherein said intermeshing screw rotor has intermeshing surfaces, wherein said step of leveling further comprises positioning and

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rotating said intermeshing screw rotor such that said intermeshing surfaces are located a predetermined distance from said surface, said predetermined distance selected to allow said intermeshing surfaces to level said coating.

7. (Original) The method of claim 2 wherein said surface is a surface of the tip portions of said lobes of said rotors.

8. (Original) The method of claim 2 wherein said surface is a surface of said root portions of said lobes of said rotors.

9. (Original) The method of claim 2 wherein said surface is a surface of said bores.

10. (Original) The method of claim 6, wherein said surface is a surface of the tip portions of said lobes of said rotors.

11. (Original) The method of claim 6, wherein said surface is a surface of said root portions of said lobes of said rotors.

12. (Original) The method of claim 6, wherein said surface is a surface of said bores.

13. (Original) A method for coating surfaces of a screw machine which comprises the steps of:

providing at least one of a plurality of screw machine components comprising a rotor housing having at least a pair of parallel, overlapping bores; at least a conjugate pair of intermeshing rotors located in said bores, each of said rotors having helical lobes and intervening flutes; an outlet casing disposed at a discharge end of said rotor housing, each of said rotors having a discharge end facing said outlet casing;

rough coating a surface of at least one of said plurality of components with a conformable coating, wherein said is applied to said surface and has one of variable thickness over the surface and evenly applied with a substantially excess thickness on said surface; and

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leveling said conformable coating to a substantially uniform thickness prior to final assembly of said plurality of components, said substantially uniform thickness selected to ease assembly of said components, while maintaining coating performance criteria.

14. (Currently Amended) The ~~screw-machine method~~ of claim 13 wherein said surface is a surface of said discharge ends of said rotors.

15. (Original) The method of claim 13, wherein said surface is a surface of said outlet casing.

16. (Original) The method of claim 13 further characterized by a member located intermediate said discharge ends of said rotors and said outlet casing, said member having a surface facing said discharge ends of said rotors, wherein said surface is a surface of said member.

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ARGUMENTS

In the Claims, claims 1-16 are pending. Claims 4 and 14 have been currently amended. Applicants submit the foregoing amendments and following remarks. Re-examination and favorable reconsideration are respectfully requested.

Information Disclosure Statement

Applicants hereby concurrently file an Information Disclosure Statement.

Claim 4

Claim 4 was amended to correct a minor informality in the form of a typographical error.

Rejection Under 35 U.S.C. § 112, second paragraph

The Office rejected claim 14 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants hereby amend claim 14 as set forth above. Applicants respectfully request reconsideration and withdrawal of this rejection.

Rejection Under 35 U.S.C. § 102

The Office further rejected claim 1 under 35 USC § 102 as being anticipated by the Rao reference (U.S. Patent No. 5,638,600). Applicants respectfully submit that the step of leveling is not shown by Rao. That is, in Rao, either the final step is grinding per column 2, lines 5-10 or operating the pump to abrade per column 2, lines 28-30. The intermediate step of leveling, prior to assembly and finalizing the coat, is not disclosed. Accordingly, claim 1 is submitted to be in condition for allowance. Claims 2-12, dependent from claim 1, based on the same argument are further submitted to be in condition for allowance.

Rejection Under 35 U.S.C. § 103

In addition, claims 13 – 16 were rejected under 35 USC § 103 in view of the Rao reference. Applicants respectfully disagree with this rejection. In Rao, radial discharge is shown

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such that an outlet casing is not used and there is no discharge end, as provided in Applicants invention, to be coated. In Applicants invention the discharge end, as provided in the specification is a vertical wall against which the refrigerant is compressed. Accordingly, Applicants submit that claims 13-16 are in condition for allowance.

Please charge any required fee or credit overpayment to Deposit Account 03-0835.

Should the Examiner believe that a telephone or personal interview may facilitate resolution of any matters in this case, Applicants' attorney may be contacted by telephone at the number provided below.

Respectfully submitted,
WILLIAM BUSH et al.

Resent

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